REMARKS

The Examiner is thanked for the careful examination of the present application. In view of the amendments and arguments presented in detail below, it is submitted that all claims are patentable over the prior art.

I. The Claimed Invention

Independent Claim 1 is directed to a communications system that includes a plurality of servers connected together in a network for processing a plurality of different job types having respective different resource usage characteristics associated therewith. Each server, after beginning execution of at least one job, determines its own respective health metric based upon the at least one job being executed thereby and weighs the health metric based upon the respective resource usage characteristic of the at least one job. The resource usage characteristic represents resources being consumed by the at least one job. The servers map the weighted health metrics for different resource usage characteristics to a common scale. The communications system includes a dispatcher for collecting the commonly scaled weighted health metrics from the servers by polling the servers for the weighted health metrics and distributing jobs to the servers based thereon.

Independent Claim 9 is directed to a load distributor for a plurality of servers. Independent Claim 14 is directed to a job distribution method for a plurality of servers. Independent Claim 17 is directed to a corresponding computer readable medium.

II. The Claims Are Patentable

The Examiner rejected independent Claims 1, 9, 14, and 17 over the combination of Albert et al. and Dar. Albert et al. is directed to a system and method for selecting a server to handle a connection. The method includes receiving at a service manager a connection request intercepted by a network device having a forwarding agent that is operative to receive instructions from a service manager, the connection request having been forwarded from the forwarding agent on the network device to the service manager.

A preferred server is selected at the service manager from among a group of available servers. The preferred server is the server that is to service the connection request. Instructions are sent from the service manager to the forwarding agent. The instructions include the preferred server that is to service the connection request so that the connection request may be forwarded from the network device to the preferred server. The servers send feedback messages to the service manager. The service manager uses these feedback messages to perform load balancing.

The Examiner correctly recognized that Albert et al. fails to teach different resource usage characteristics, and determination of a health metric of a server by that server based upon resource usage characteristics after beginning execution of a job. In an attempt to provide these critical deficiencies of Albert et al., the Examiner looked to Dar.

Dar discloses a communications system including a switch, clients, a network, and servers. The switch performs

typical routing functions such as network address translation from virtual addresses to actual addresses, routing of packets, and using access control lists. The switch also monitors the health of the servers by monitoring and aggregating metrics indicative of the health. The metrics include processor, memory, and input/output metrics. This monitoring can be periodic.

Even the combination of Albert et al. and Dar, however, fails to disclose a dispatcher for collecting the commonly scaled weighted health metrics from the servers by polling the servers for the weighted health metrics and distributing jobs to the servers based thereon, as recited in independent Claim 1, for example. The Examiner asserted the recitation in col. 32, lines, 30-31 of Albert et al. of "Next… the service manager retrieves the real machine weights for the virtual machine" to disclose polling the servers for the weighted health metrics, but is mistaken.

As explained in Col. 32, lines 38-40 of Albert et al., "[t]he real machine is selected by the service manager using the weights retrieved from its database for the virtual machine." That is, the reference in the portion cited by the Examiner to retrieving the real machine weights is referring to the service manager retrieving the weights from its own database and not the real machines.

In fact, the real machines of Albert et al. all send their feedback messages to a given real machine, which in turn sends all the feedback messages to the service manager, as explained in col. 29, lines 49-52. Therefore, rather than the service manager of Albert et al. polling the real machines for

the feedback messages, the given real machine discussed above sends the feedback messages to the service manager, absent any sort of polling.

Furthermore, it is further noted that independent Claim 1 recites a dispatcher for collecting the commonly scaled weighted health metrics from the servers. In Albert et al. the feedback messages from the various real machines are all sent to a given real machine, and that one given real machine sends all the feedback messages to the service manager. This is not collecting commonly scaled weighted health metrics from of a plurality of servers; it is collecting feedback messages from a single real machine of a plurality thereof.

Consequently, Albert et al. fails to disclose a dispatcher for collecting the commonly scaled weighted health metrics from the servers by polling the servers for the weighted health metrics and distributing jobs to the servers based thereon. Since Dar does not disclose this critical deficiency of Albert et al., the combination thereof does not disclose the above noted feature. As such, independent Claim 1 is patentable over the combination of Albert et al. and Dar. Independent Claims 9, 14, and 17 contain similar recitations, and are patentable over the combination of Albert et al. and Dar for the same reasons. The dependent claims, which recite yet further distinguishing features, are likewise patentable and require no further discussion herein.

CONCLUSION

In view of the amendments to the claims and the arguments provided herein, it is submitted that all the claims are patentable. Accordingly, a Notice of Allowance is requested in due course. Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

JEREMY B. HERMAN, ESQ.
Reg. No. 60,582
Allen, Dyer, Doppelt, Milbrath & Gilchrist, P.A.
255 S. Orange Avenue, Suite 1401
Post Office Box 3791
Orlando, Florida 32802
407-841-2330